

Tohoku Forum for Creativity Thematic Program 2016

Comprehensive Research on Materials, **Systems and Energy** for a Sustainable Future of the Earth

By Toshiyuki Takagi, Hiroo Yugami, Takashi Goto, Koshi Adachi and Naoto Wada

Agenda: TFC Conference Lecture on March 22, Wednesday, 2017

At TOKYO ELECTRON House of Creativity, Katahira Campus, Tohoku University 2-1-1 Katahira, Aoba-ku, Sendai 980-8577 JAPAN

10:00-10:05 Introduction by Professor Shigeru Obayashi

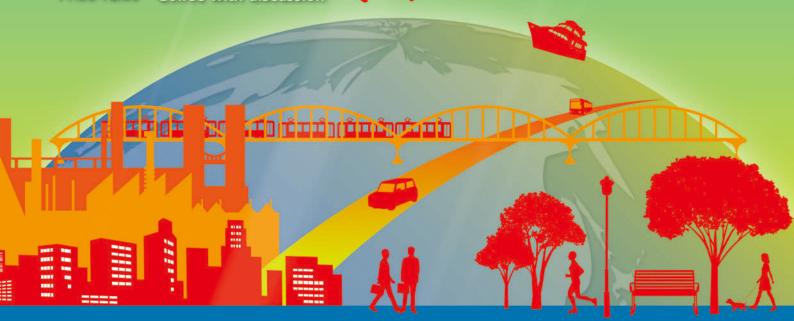
Director, Institute of Fluid Science, Tohoku University

Lecture by Professor Helmut Clemens
Montanuniversität Leoben, Leoben, Austria 10:05-11:35

(Professor Helmut Clemens is Head of the Chair of Physical Metallurgy and Metallic Materials at the Montanuniversität Leoben, Austria. Throughout his entire career he worked on development, processing and characterization of advanced functional and structural materials. Prof. Clemens started his scientific work with semiconductor technology, implementing Austria's first molecular beam epitaxy system for the growth of so-called IV-VI compound superlattices. The last 25 years, however, he focused his research on light-weight intermetallic titanium aluminides (TiAl alloys) which are considered as key structural materials for high temperature application in advanced next generation jet and automotive engines. For his achievements on TiAl alloys, Prof. Clemens was awarded with the famous Honda Prize in 2014.)

Lecture Title: Intermetallic titanium aluminides – an example how research on innovative materials has a sustainable impact on environmental-friendly aviation

Coffee with discussion 11:35-12:00





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